PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	AND FOUR DOTHER AIRCO
1054MUM2003		see Form PCT/ISA/220 ell as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/IB2004/051922	30/09/2004	08/10/2003
Applicant		
NICHOLAS PIRAMAL INDIA LI	MITED	
This International Search Report has bee according to Article 18. A copy is being tra	n prepared by this International Searching Aut ansmitted to the International Bureau.	hority and is transmitted to the applicant
This International Search Report consists	of a total of sheets.	
X It is also accompanied by	a copy of each prior art document cited in this	report.
Basis of the report		
a. With regard to the language, the	international search was carried out on the baress otherwise indicated under this item.	sis of the international application in the
The international this Authority (Ru	search was carried out on the basis of a transle 23.1(b)).	lation of the international application furnished to
b. With regard to any nucleo	otide and/or amino acid sequence disclosed	in the international application, see Box No. I.
2. Certain claims were fou	nd unsearchable (See Box II).	
3. X Unity of invention is lac	king (see Box III).	
4. With regard to the title,		
X the text is approved as su	bmitted by the applicant.	Õ
the text has been establis	hed by this Authority to read as follows:	Š
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5. With regard to the abstract,		
the text is approved as sul	, , , , , , , , , , , , , , , , , , , ,	<u> </u>
the text has been establish may, within one month from	ned, according to Rule 38.2(b), by this Authorit m the date of mailing of this international searc	y as it appears in Box No. IV. The applicant ch report, submit comments to this Authority.
6. With regard to the drawings,	•	
a. the figure of the drawings to be pu	ublished with the abstract is Figure No	
as suggested by the	ne applicant.	
as selected by this	Authority, because the applicant failed to sug-	gest a figure.
as selected by this	Authority, because this figure better character	rizes the invention.
b. none of the figures is to be	published with the abstract.	

Form PCT/ISA/210 (first sheet) (January 2004)

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K31/4035 C07D209/46 A61P7/02 C07D401/06 C07D413/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BEILSTEIN Data, CHEM ABS Data

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
EP 0 655 439 A (ELI LILLY AND COMPANY) 31 May 1995 (1995-05-31) page 1, lines 23-26; claims 1-4 page 17, line 38 - page 21, line 10 page 27, line 1 - page 30, line 40 example 9	1-20
EP 1 391 451 A (EISAI CO., LTD) 25 February 2004 (2004-02-25) paragraphs [3364], [3365]; claims 1-32 examples	1,2,4, 10-20
& WO 02/085855 A (EISAI CO., LTD; SUZUKI, SHUICHI; KOTAKE, MAKOTO; MIYAMOTO, MITSUAKI; K) 31 October 2002 (2002-10-31)	1,2,4, 10-20
-/	
	31 May 1995 (1995-05-31) page 1, lines 23-26; claims 1-4 page 17, line 38 - page 21, line 10 page 27, line 1 - page 30, line 40 example 9 EP 1 391 451 A (EISAI CO., LTD) 25 February 2004 (2004-02-25) paragraphs [3364], [3365]; claims 1-32 examples & WO 02/085855 A (EISAI CO., LTD; SUZUKI, SHUICHI; KOTAKE, MAKOTO; MIYAMOTO, MITSUAKI; K) 31 October 2002 (2002-10-31)

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٠s	Special categories of cited documents :	
- 1	 document defining the general state of the art which is not considered to be of particular relevance 	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the
"E"	 earlier document but published on or after the international filing date 	invention "X" document of particular relevance; the claimed invention
٦.	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another	cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

n the priority date claimed "&" document member of the same patent family

Date of the actual completion of the international search

2 March 2005

Name and mailing address of the ISA

European Patent Office P.B. 58

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016

Further documents are listed in the continuation of box C.

\ **1** 7. 05. 05

Date of mailing of the international search report

X Patent family members are listed in annex.

Seymour, L

Authorized officer

Form PCT/ISA/210 (second sheet) (January 2004)

	tion) DOCUMENTS CONSIDERED TO BE RELEVANT	
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	EP 0 540 334 A (MERCK & CO. INC) 5 May 1993 (1993-05-05) cited in the application claims 1,4,13-15	1,2, 10-13
X	US 3 997 572 A (CUSIC ET AL) 14 December 1976 (1976-12-14) column 1, line 15 - column 2, line 13 column 2, line 67 - column 3, line 7 examples 12,15	1,2, 10-13
x	DD 66 175 A (TONJES H) 5 April 1969 (1969-04-05) column 1, line 15 - line 17 formula I; examples 8, 14	1,2, 10-13
x	GB 989 917 A (VEB ARZNEIMITTELWERK DRESDEN) 22 April 1965 (1965-04-22) page 1, lines 14,15; claims 1,13	1,2, 10-13
X	NEW J S ET AL: "Buspirone analogues. 2. Structure-activity relationships of aromatic imide derivatives" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 29, no. 8, 1986, pages 1476-1482, XP002939655 ISSN: 0022-2623 tables I,II	1,2, 10-13
(SUGIMOTO H ET AL: "Synthesis and structure-activity relationships of acetylcholinesterase inhibitors: 1-benzyl-4-(2-phthalimidoethyl)piperidine and related derivatives" JOURNAL OF MEDICINAL CHEMISTRY., vol. 35, no. 24, 1992, pages 4542-4548, XP002319779 USAMERICAN CHEMICAL SOCIETY. WASHINGTON. table II	1,2, 10-13
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INTERNATIONAL SEARCH REPORT

International application No. PCT/IB2004/051922

<u> </u>	Il Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This I	International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This Int	ernational Searching Authority found multiple inventions in this international application, as follows:
	see additional sheet
· 🔲	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
	which lees were paid, specifically claims Nos.:
ָּן ע	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
	1-20
	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-20

Compounds of formula I and corresponding syntheses, compositions and uses thereof

2. claim: 21

Alternative process for introducing a keto substituent at the ortho position of phenols.

3. claim: 22

Alternative process for introducing a keto substituent at the para position of phenols.

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Information on patent family members

International Application No
PCT/IB2004/051922

					02004/031922
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0655439	A	31-05-1995	CA EP JP	2134192 A1 0655439 A2 7188165 A	13-05-1995 31-05-1995 25-07-1995
EP 1391451	A	25-02-2004	BR CAP HUX NOS CZ EP WO WO US US US	0208985 A 2446924 A1 1391451 A1 0400467 A2 PA03009497 A 20034632 A 2005004204 A1 1503784 A 20032824 A3 1391456 A1 1386912 A1 1394152 A1 02085850 A1 02088092 A1 02088094 A1 02085855 A1 2004242627 A1 2004254376 A1 2005004197 A1	09-03-2004 31-10-2002 25-02-2004 28-02-2005 24-05-2004 19-12-2003 06-01-2005 09-06-2004 14-04-2004 25-02-2004 03-03-2004 31-10-2002 07-11-2002 07-11-2002 07-11-2002 02-12-2004 16-12-2004
WO 02085855	A	31-10-2002	BR CA CN CZ EP EP HU WO WO WO NO US US	0208985 A 2446924 A1 1503784 A 20032824 A3 1391456 A1 1386912 A1 1394152 A1 1391451 A1 0400467 A2 02085850 A1 02088092 A1 02088094 A1 02085855 A1 PA03009497 A 20034632 A 2004242627 A1 2004254376 A1 2005004197 A1 2005004204 A1	09-03-2004 31-10-2002 09-06-2004 14-04-2004 25-02-2004 03-03-2004 25-02-2004 25-02-2004 28-02-2005 31-10-2002 07-11-2002 07-11-2002 31-10-2002 24-05-2004 19-12-2003 02-12-2004 16-12-2004 06-01-2005
EP 0540334	A	•	US CA DE EP JP JP US US	5272158 A 2081614 A1 69207351 D1 0540334 A1 2090253 C 5262731 A 7116144 B 5389631 A 5416099 A	21-12-1993 30-04-1993 15-02-1996 05-05-1993 02-09-1996 12-10-1993 13-12-1995 14-02-1995 16-05-1995
US 3997572	Α		US BE DE FR	3917636 A 745334 A1 2004562 A1 2034517 A5	04-11-1975 03-08-1970 27-08-1970 11-12-1970

Form PCT/ISA/210 (patent family annex) (January 2004)

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/IB2004/051922

				101/182004/031922		
	Publication date		Patent family member(s)	Publication date		
A		GB US US ZA	1253002 A 3642836 A 3770763 A 7000739 A	10-11-1971 15-02-1972 06-11-1973 31-03-1971		
A		NONE				
Α	22-04-1965	FR	3397 M			
	A	A A	A GB US US ZA A NONE	Publication date Patent family member(s) A GB 1253002 A US 3642836 A US 3770763 A ZA 7000739 A A NONE		